

IN THE CLAIMS

1. (Canceled) A method of using a coating composition for substantially preventing moisture loss from a cured composite coated with the composition, the method comprising:
applying to a surface of a cured composite, the composite comprising residual moisture from a cure reaction, a composition prepared by heating and blending a mixture comprising waxes and paraffins and dispersing a powdered metal, metal oxide, or metal carbide dispersed throughout the mixture; and cooling the mixture to form a waxy solid substantially free of entrained gasses with powdered metal, metal oxide or carbide dispersed therein; and
forming a coating of the composition of the composite surface without need for heating the composition to form a homogeneous coating of the composition on the composite, whereby the coating reduces moisture loss.
2. (Canceled) The method of claim 1, wherein the mixture comprises a mixture of beeswax and paraffins.
3. (Canceled) The method of claim 2, wherein the paraffins comprise primarily aliphatic hydrocarbons having chain lengths in the range from about 18 to about 36 carbon atoms.
4. (Canceled) The method of claim 1, wherein the metal comprises aluminum.
5. (Canceled) The method of claim 1, wherein the metal oxide comprises titanium oxide or aluminum oxide.
6. (Canceled) The method of claim 2, wherein the metal comprises aluminum.
7. (Canceled) The method of claim 2, wherein the metal oxide comprises titanium oxide or aluminum oxide.
8. (Canceled) The method of claim 1, wherein the mixture, before addition of powdered metal or metal oxide, has a melting point in the range of about 120° to 250°F.

9. (Canceled) The method of claim 1, wherein; the composition cools to ambient temperature substantially free of occlusion of gas bubbles.
10. (Canceled) The method of claim 1, wherein the composition is a solid at temperatures in the range below about 120°F, and liquefies upon heating to a temperature in the range from about 140° to about 180°F.
11. (Canceled) The method of claim 1, wherein the powdered metal or metal oxide or metal carbide comprises a sufficient amount to permit uniform heating of a mass of the composition, and to provide such internal compression of a mass of the composition upon cooling as to substantially exclude occluded gasses from a cooled mass.
12. (Canceled) The method of claim 1, wherein the amount of powdered metal or metal oxide or metal carbide comprises from about 5 to about 15 wt. %, based on the weight of the mixture of paraffin and beeswax.
13. (Canceled) The method of claim 1, wherein the forming of the coating produces a coating that reduces moisture loss by from about 60 to about 100% as compared to an uncoated composite.
14. (Canceled) A method of using a coating composition to substantially prevent development of cracks in a cured composite otherwise prone to moisture loss under environmental conditions to which it is exposed, the method comprising:
 - applying to a surface of the composite a composition that is a waxy solid at room temperature, the composition comprising:
 - a) a mixture of esters of fatty acids and aliphatic hydrocarbons having a softening point in the range from about 120° to about 180°F; and
 - b) a powdered additive in sufficient amount to permit uniform heating of a mass of the composition, the additive providing such compression during cooling in preparation of the

composition as to substantially exclude occluded gasses from a cooled mass of the composition; and

forming a homogeneous coating on the composite surface without need for heating the composition, the coating substantially preventing loss from the composite of residual moisture resulting from cure of a polymer of the composite.

15. (Canceled) The method of claim 14, wherein the mixture comprises paraffins and waxes, the paraffins primarily having a chain length of from about 18 to about 36 carbon atoms.

16. (Canceled) The method of claim 14, wherein the powdered additive is selected from the group consisting of powdered metals, metal carbides and metal oxides.

17. (Canceled) The method of claim 15, wherein the powdered additive comprises powdered aluminum comprising particulates in the range from about 25 to about 60 microns.

18. (Canceled) The method of claim 16, wherein the powdered additive is selected from aluminum and titanium oxide.

19. (Canceled) The method of claim 14, wherein the composition comprises a solid at ambient temperatures in the range below about 120°F.

20. (Canceled) The method of claim 14, wherein when coated onto a composite material subject to moisture absorption under ambient conditions of temperature and humidity, the composition reduces moisture absorption by from about 60 to about 100%.

21. (New) A coating composition for substantially preventing moisture loss from a cured composite coated with the composition, the coating composition prepared by a process comprising:

heating and blending a mixture comprising waxes and paraffins and dispersing a powdered metal, metal oxide, or metal carbide dispersed throughout the mixture; and

cooling the mixture to form a waxy solid substantially free of entrained gasses with powdered metal, metal oxide or carbide dispersed therein;

wherein heating the composition is not required to form a homogeneous coating of the composition on the composite, and wherein the coating reduces moisture loss from the composite coated therewith including reducing loss of residual moisture produced by a cure reaction in formation of the composite.

22. (New) The coating composition of claim 21, wherein the mixture comprises a mixture of beeswax and paraffins.
23. (New) The coating composition of claim 22, wherein the paraffins comprise primarily aliphatic hydrocarbons having chain lengths in the range from about 18 to about 36 carbon atoms.
24. (New) The coating composition of claim 21, wherein the metal comprises aluminum.
25. (New) The coating composition of claim 21, wherein the metal oxide comprises titanium oxide or aluminum oxide.
26. (New) The coating composition of claim 22, wherein the metal comprises aluminum.
27. (New) The coating composition of claim 22, wherein the metal oxide comprises titanium oxide or aluminum oxide.
28. (New) The coating composition of claim 21, wherein the mixture, before addition of powdered metal or metal oxide, has a melting point in the range of about 120° to 250°F.
29. (New) The coating composition of claim 21, wherein the composition is a solid at temperatures in the range below about 120°F, and liquefies upon heating to a temperature in the range from about 140° to about 180°F.

30. (New) The coating composition of claim 21, wherein the powdered metal or metal oxide or metal carbide comprises a sufficient amount to permit uniform heating of a mass of the composition, and to provide such internal compression of a mass of the composition upon cooling as to substantially exclude occluded gasses from a cooled mass.
31. (New) The coating composition of claim 21, wherein the amount of powdered metal or metal oxide or metal carbide comprises from about 5 to about 15 wt. %, based on the weight of the mixture of paraffin and beeswax.
33. (New) The coating composition of claim 21, wherein when coated onto a composite material subject to residual moisture loss, the composition reduces moisture loss by from about 60 to about 100% as compared to an uncoated composite.
34. (New) A coating composition to substantially prevent development of cracks in a cured composite otherwise prone to moisture loss under environmental conditions to which it is exposed, the composition comprising:
- a) a mixture of esters of fatty acids and aliphatic hydrocarbons having a softening point in the range from about 120° to about 180°F; and
 - b) a powdered additive in sufficient amount to permit uniform heating of a mass of the composition, the additive providing such compression during cooling in preparation of the composition as to provide compression of a mass of the composition upon cooling sufficient to substantially exclude occluded gasses from a cooled mass of the composition; and
- wherein the composition comprises a waxy solid at room temperature, and wherein heating the composition is not needed to render homogeneous a coating of the composition as applied to a composite, and the coating substantially prevents loss from the composite of residual moisture resulting from cure of a polymer of the composite.
35. (New) The coating composition of claim 34, wherein the mixture comprises paraffins and waxes, the paraffins primarily having a chain length of from about 18 to about 36 carbon atoms.

36. (New) The coating composition of claim 34, wherein the powdered additive is selected from the group consisting of powdered metals, metal carbides and metal oxides.

37. (New) The coating composition of claim 35, wherein the powdered additive comprises powdered aluminum comprising particulates in the range from about 25 to about 60 microns.

38. (New) The coating composition of claim 36, wherein the powdered additive is selected from aluminum and titanium oxide.

39. (New) The coating composition of claim 34, wherein the composition comprises a solid at ambient temperatures in the range below about 120°F.

40. (New) The coating composition of claim 34, wherein when coated onto a composite material subject to moisture absorption under ambient conditions of temperature and humidity, the composition reduces moisture absorption by from about 60 to about 100%.